

This Page: Mangrove Plug Area (North Area)

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Brackish Marsh

Project..... Cameron Creole Watershed Plugs Re-evaluation Marsh type acres..... 10677

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	40	0.46	40	0.46	39	0.45
V2	% Aquatic	60	0.72	65	0.76	80	0.86
V3	Interspersion	%	0.42	%	0.42	%	0.42
	Class 1						
	Class 2	40		40		40	
	Class 3	30		30		30	
	Class 4	30		30		30	
V4	%OW <= 1.5ft	85	0.90	85	0.90	88	0.84
V5	Salinity (ppt)	3	1.00	3	1.00	3	1.00
V6	Access Value	0.80	0.82	0.80	0.82	0.80	0.82
		HSI = 0.61		HSI = 0.62		HSI = 0.62	

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Brackish Marsh

Project..... Cameron Creole Watershed Plugs Re-evaluation Marsh type acres..... 10677

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	40	0.46	40	0.46	41	0.47
V2	% Aquatic	60	0.72	65	0.76	83	0.88
V3	Interspersion	%	0.42	%	0.42	%	0.42
	Class 1						
	Class 2	40		40		40	
	Class 3	30		30		30	
	Class 4	30		30		30	
V4	%OW <= 1.5ft	85	0.90	85	0.90	90	0.80
V5	Salinity (ppt)	3	1.00	5	1.00	5	1.00
V6	Access Value	0.80	0.82	0.80	0.82	0.80	0.82
		HSI = 0.61		HSI = 0.62		HSI = 0.63	

This Page: Mangrove Plug Area (North Area)

AAHU CALCULATION

Project: Cameron Creole Watershed Plugs Re-evaluation

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	10677	0.61	6525.03	
1	10677	0.62	6569.77	6547.40
20	10677	0.62	6589.97	125017.57
			AAHU's = 6578.25	

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	10677	0.61	6525.03	
1	10677	0.62	6569.77	6547.40
20	10677	0.63	6696.22	126026.94
			AAHU's 6628.72	

NET CHANGE IN AAHU'S DUE TO PROJECT		
A. Future With Project AAHU's	=	6628.72
B. Future Without Project AAHU's	=	6578.25
Net Change (FWP - FWOP)	=	50.47

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Brackish Marsh

Project..... Cameron - Creole Plugs Re-evaluation

Marsh type acres..... 1715

East Area (Mangrove Bayou Plug effect only) - *Control Area*

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	38.1	0.44	38.1	0.44	37	0.43
V2	% Aquatic	20	0.44	27	0.49	50	0.65
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4						
	Class 5						
V4	%OW ≤ 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)	4	1.00	4	1.00	4	1.00
V6	Access Value	0.80	0.82	0.80	0.82	0.80	0.82
HSI =		0.57		HSI =	0.58	HSI =	0.59

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Brackish Marsh

Project..... Cameron – Creole Plugs Re – evaluation
 East Area (Mangrove Bayou Plug effect only)
 Condition: Future With Project

Marsh type acres..... 1715

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	38.1	0.44	38.1	0.44	37.1	0.43
V2	% Aquatic	20	0.44	28	0.50	55	0.69
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4						
	Class 5						
V4	%OW <= 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)	4	1.00	3.5	1.00	3.5	1.00
V6	Access Value	0.80	0.82	0.80	0.82	0.80	0.82
		HSI =	0.57	HSI =	0.58	HSI =	0.60

AAHU CALCULATION

Project: Cameron—Creole Plugs Re—evaluation
East Area (Mangrove Bayou Plug effect only)

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1715	0.57	972.24	
1	1715	0.58	986.49	979.36
20	1715	0.59	1016.69	19030.16

AAHU's = 1000.48

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1715	0.57	972.24	
1	1715	0.58	988.43	980.33
20	1715	0.60	1025.09	19128.41

AAHU's 1005.44

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1005.44
B. Future Without Project AAHU's =	1000.48
Net Change (FWP - FWOP) =	4.96

Area 2

*** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY0 ***

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 55

*** SIV1 = 1.00 ***

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 1

*** SIV2 = 0.31 ***

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

*** SIV3 = 0.80 ***

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	320
2	4080
3	0
TOTAL ACRES....	4400

*** SIV4 = 0.96 ***

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	650
2	1800
3	1000
4	150
TOTAL ACRES....	3600

*** SIV5 = 0.76 ***

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 9

*** SIV6 = 1.00 ***

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

*** SIV7 = 0.80 ***

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY0

*** HSI	TY0	0.74
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Area 2

** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY1 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 58

** SIV1 = 1.00 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 1

** SIV2 = 0.31 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

** SIV3 = 0.80 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	328
2	4136
3	0
TOTAL ACRES....	4462

1
2
3

** SIV4 = 0.96 **

TOTAL ACRES.... 4462

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	520
2	1680
3	1000
4	150
TOTAL ACRES....	3350

1
2
3
4

** SIV5 = 0.75 **

TOTAL ACRES.... 3350

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 8.5

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY1

** HSI TY1 0.74 **

Area 2

** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY5 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 59

** SIV1 = 1.00 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 5

** SIV2 = 0.37 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

** SIV3 = 0.80 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	351
2	4361
3	0
TOTAL ACRES....	4712

1 351
2 4361
3 0

** SIV4 = 0.96 **

TOTAL ACRES.... 4712

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	390
2	1560
3	1000
4	150
TOTAL ACRES....	3100

1 390
2 1560
3 1000
4 150
TOTAL ACRES.... 3100

** SIV5 = 0.74 **

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 8.5

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY5

** HSI TY5 0.76 **

Area 2

** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY10 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 63

** SIV1 = 1.00 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 5

** SIV2 = 0.37 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

** SIV3 = 0.80 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	382
2	4643
3	0
TOTAL ACRES....	5025

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	280
2	1440
3	1000
4	150
TOTAL ACRES....	2850

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 8.5

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY10

** HSI	TY10	0.76
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Area 2

** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY15 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(>= 10% CANOPY COVER):

```

*****
**                                     **
PERCENT =      67      ** SIV1 =      1.00 **
**                                     **
*****

```

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

```

*****
**                                     **
PERCENT =      5      ** SIV2 =      0.37 **
**                                     **
*****

```

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

```

*****
**                                     **
CLASS =      2      ** SIV3 =      0.80 **
**                                     **
*****

```

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	413
2	4924
3	0
TOTAL ACRES....	5337

```

*****
**                                     **
** SIV4 =      0.96 **
**                                     **
*****

```

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	130
2	1320
3	1000
4	150
TOTAL ACRES....	2600

```

*****
**                                     **
** SIV5 =      0.71 **
**                                     **
*****

```

VARIABLE 6: AVERAGE ANNUAL SALINITY

```

*****
**                                     **
PPT =      8.5      ** SIV6 =      1.00 **
**                                     **
*****

```

VARIABLE 7: AQUATIC ORGANISM ACCESS

```

*****
**                                     **
ACCESS VALUE =      0.8      ** SIV7 =      0.80 **
**                                     **
*****

```

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY15

```

*****
**                                     **
** HSI TY15      0.70 **
**                                     **
*****

```

Area 2

** BRACKISH MARSH: FUTURE WITHOUT PROJECT -- TY20 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(>= 10% CANOPY COVER):

PERCENT = 71

```
*****
**                                     **
** SIV1 = 0.98 **
**                                     **
*****
```

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 5

```
*****
**                                     **
** SIV2 = 0.37 **
**                                     **
*****
```

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 3

```
*****
**                                     **
** SIV3 = 0.50 **
**                                     **
*****
```

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	444
2	5206
3	0
TOTAL ACRES....	5650

```
*****
**                                     **
** SIV4 = 0.98 **
**                                     **
*****
```

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	0
2	1200
3	1000
4	150
TOTAL ACRES....	2350

```
*****
**                                     **
** SIV5 = 0.89 **
**                                     **
*****
```

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 8.5

```
*****
**                                     **
** SIV6 = 1.00 **
**                                     **
*****
```

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

```
*****
**                                     **
** SIV7 = 0.80 **
**                                     **
*****
```

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITHOUT PROJECT, TY20

```
*****
**                                     **
** HSI TY20 0.72 **
**                                     **
*****
```

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY0 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 55
** SIV1 = 1.00 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 1
** SIV2 = 0.31 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2
** SIV3 = 0.80 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	320
2	4080
3	0
TOTAL ACRES....	4400

** SIV4 = 0.96 **

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	650
2	1800
3	1000
4	150
TOTAL ACRES....	3600

** SIV5 = 0.78 **

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 9
** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8
** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE, IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7 WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE 0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY0

** HSI TY0 0.74 **

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY1 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 58

```
*****
**
** SIV1 = 1.00 **
**
*****
```

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 1

```
*****
**
** SIV2 = 0.31 **
**
*****
```

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

```
*****
**
** SIV3 = 0.80 **
**
*****
```

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	0
2	4492
3	0
TOTAL ACRES.... 4492	

TOTAL ACRES.... 4492

```
*****
**
** SIV4 = 1.00 **
**
*****
```

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	520
2	1580
3	1000
4	150
TOTAL ACRES.... 3230	

TOTAL ACRES.... 3230

```
*****
**
** SIV5 = 0.74 **
**
*****
```

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 7

```
*****
**
** SIV6 = 1.00 **
**
*****
```

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

```
*****
**
** SIV7 = 0.80 **
**
*****
```

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY1

```
*****
*****
**
** HSI TY1 0.74 **
**
*****
*****
```

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY5 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(> = 10% CANOPY COVER):

PERCENT = 61

** SIV1 = 1.00 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 15

** SIV2 = 0.51 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 2

** SIV3 = 0.80 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	0
2	4862
3	0
TOTAL ACRES....	4862

** SIV4 = 1.00 **

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	390
2	1320
3	1000
4	150
TOTAL ACRES....	2860

** SIV5 = 0.72 **

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 7

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN 81 OF ZERO. THEREFORE, IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7 WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE 0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY5

** HSI TY5 0.81 **

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY10 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(>= 10% CANOPY COVER):

```

*****
**                                     **
PERCENT =      67          ** SIV1 =      1.00 **
**                                     **
*****

```

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

```

*****
**                                     **
PERCENT =      15          ** SIV2 =      0.51 **
**                                     **
*****

```

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

```

*****
**                                     **
CLASS =         2          ** SIV3 =      0.80 **
**                                     **
*****

```

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	0
2	5325
3	0
TOTAL ACRES....	5325

```

*****
**                                     **
** SIV4 =      1.00 **
**                                     **
*****

```

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	260
2	1080
3	1000
4	150
TOTAL ACRES....	2490

```

*****
**                                     **
** SIV5 =      0.69 **
**                                     **
*****

```

VARIABLE 6: AVERAGE ANNUAL SALINITY

```

*****
**                                     **
PPT =          7          ** SIV6 =      1.00 **
**                                     **
*****

```

VARIABLE 7: AQUATIC ORGANISM ACCESS

```

*****
**                                     **
ACCESS VALUE =      0.8    ** SIV7 =      0.80 **
**                                     **
*****

```

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY10

```

*****
**                                     **
** HSI   TY10          0.80 **
**                                     **
*****

```

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY15 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(>= 10% CANOPY COVER):

PERCENT = 72

** SIV1 = 0.97 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 15

** SIV2 = 0.51 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 3

** SIV3 = 0.50 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	0
2	5787
3	0
TOTAL ACRES....	5787

1
2
3

TOTAL ACRES.... 5787

** SIV4 = 1.00 **

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES
1	130
2	840
3	1000
4	150
TOTAL ACRES....	2120

1
2
3
4
TOTAL ACRES.... 2120

** SIV5 = 0.65 **

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 7

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY15

** HSI TY15 0.76 **

Area 2

** BRACKISH MARSH: FUTURE WITH PROJECT -- TY20 **

VARIABLE 1: PERCENT OF WETLAND AREA COVERED BY EMERGENT VEGETATION
(>= 10% CANOPY COVER):

PERCENT = 78

** SIV1 = 0.87 **

VARIABLE 2: PERCENT OF OPEN WATER AREA DOMINATED (> 50% CANOPY COVER)
BY AQUATIC VEGETATION:

PERCENT = 15

** SIV2 = 0.51 **

VARIABLE 3: MARSH EDGE AND INTERSPERSION:

CLASS = 3

** SIV3 = 0.50 **

VARIABLE 4: WATER DURATION IN RELATION TO MARSH SURFACE:

CLASS	ACRES	
1	0	** SIV4 = 1.00 **
2	6250	
3	0	
TOTAL ACRES....	6250	

VARIABLE 5: OPEN WATER DEPTH IN RELATION TO MARSH SURFACE:

CLASS	ACRES	
1	0	** SIV5 = 0.59 **
2	600	
3	1000	
4	150	
TOTAL ACRES....	1750	

VARIABLE 6: AVERAGE ANNUAL SALINITY

PPT = 7

** SIV6 = 1.00 **

VARIABLE 7: AQUATIC ORGANISM ACCESS

ACCESS VALUE = 0.8

** SIV7 = 0.80 **

***NOTE: THE HSI FORMULA WILL NOT ALLOW AN SI OF ZERO. THEREFORE,
IF THE ACCESS VALUE IS REALLY ZERO (I.E., NO OPENINGS), SIV7
WILL SHOW ON THE SCREEN AS 0.00, BUT THE ACTUAL VALUE WILL BE
0.0001, WHICH WILL BE CARRIED DOWN TO THE HSI FORMULA.

HSI CALCULATION, BRACKISH MARSH, FUTURE WITH PROJECT, TY20

** HSI TY20 0.73 **

Area 2

** AAHU CALCULATION: FUTURE WITH PROJECT **

TY	ACRES	HSI	TOTAL HU'S	CUMMUL. HU'S
0	8,000	0.74132	5,930.57	
1	8,000	0.74212	5,936.97	5,933.77
5	8,000	0.80814	6,465.09	24,804.12
10	8,000	0.80491	6,439.30	32,260.98
15	8,000	0.76001	6,080.10	31,298.50
20	8,000	0.73125	5,850.03	29,825.32
			AAHU'S	6,206.13

** AAHU CALCULATION: FUTURE WITHOUT PROJECT **

TY	ACRES	HSI	TOTAL HU'S	CUMMUL. HU'S
0	8,000	0.74132	5,930.57	
1	8,000	0.74043	5,923.48	5,927.03
5	8,000	0.76175	6,093.99	24,034.95
10	8,000	0.76043	6,083.43	30,443.56
15	8,000	0.75884	6,070.75	30,385.44
20	8,000	0.72211	5,776.89	29,619.09
			AAHU'S	6,020.50

** NET CHANGE IN AAHU'S DUE TO PROJECT **

A. FUTURE WITH PROJECT AAHU'S = 6,206.13

B. FUTURE WITHOUT PROJECT AAHU'S = 6,020.50

** *****
 ** *****
 ** *****
 ** NET CHANGE (A. - B.) = 185.63 **
 ** *****
 ** *****